

Climate Diagrams



Puja Ahluwalia and Barney Mouat

São Paulo, Brazil

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Introduction

- The different biomes of the world are characterized by different vegetation
- Walter Climate Diagrams relate annual precipitation and temperature
- The type of vegetation can be inferred from a Walter Climate Diagram



Objective

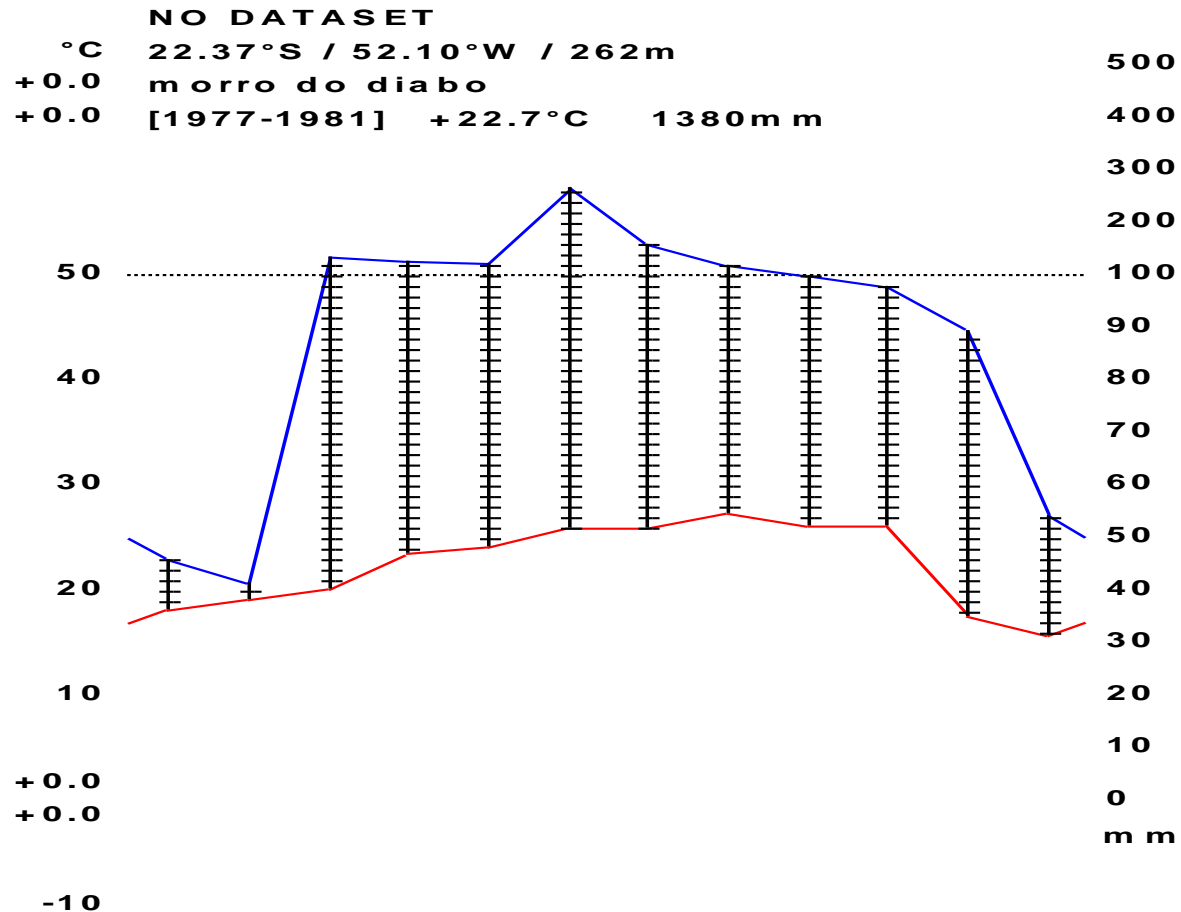
- To compile temperature and precipitation data over the past 16 years in Morro do Diabo and relate these two variables in a Walter Climate Diagram.



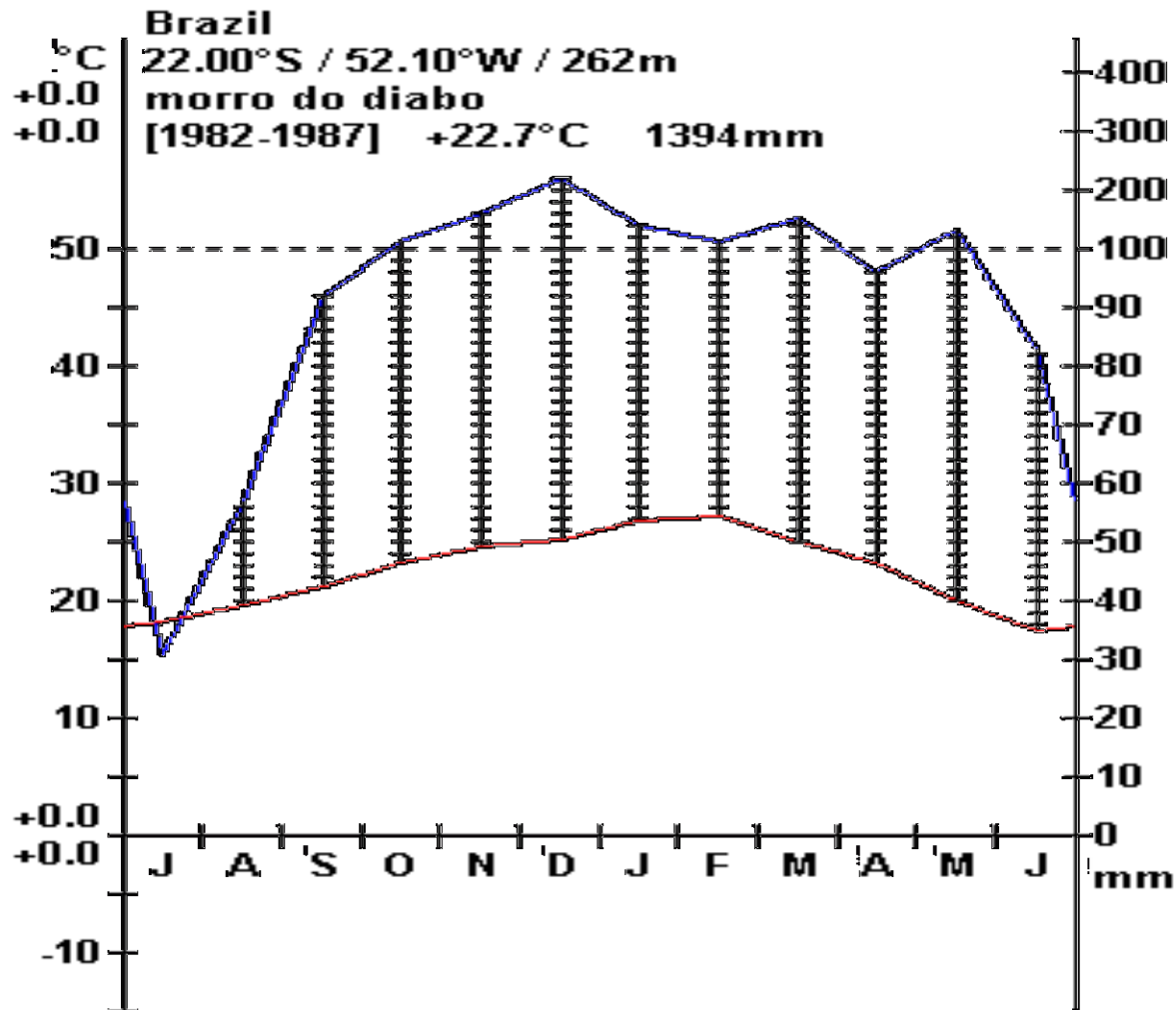
Methods

- Weather records were collected from the Morro do Diabo State Park, Sao Paolo, Brazil
- From the available data (1977-1996), four Walter climate diagrams were constructed
- A four year interval was omitted (lack of data)

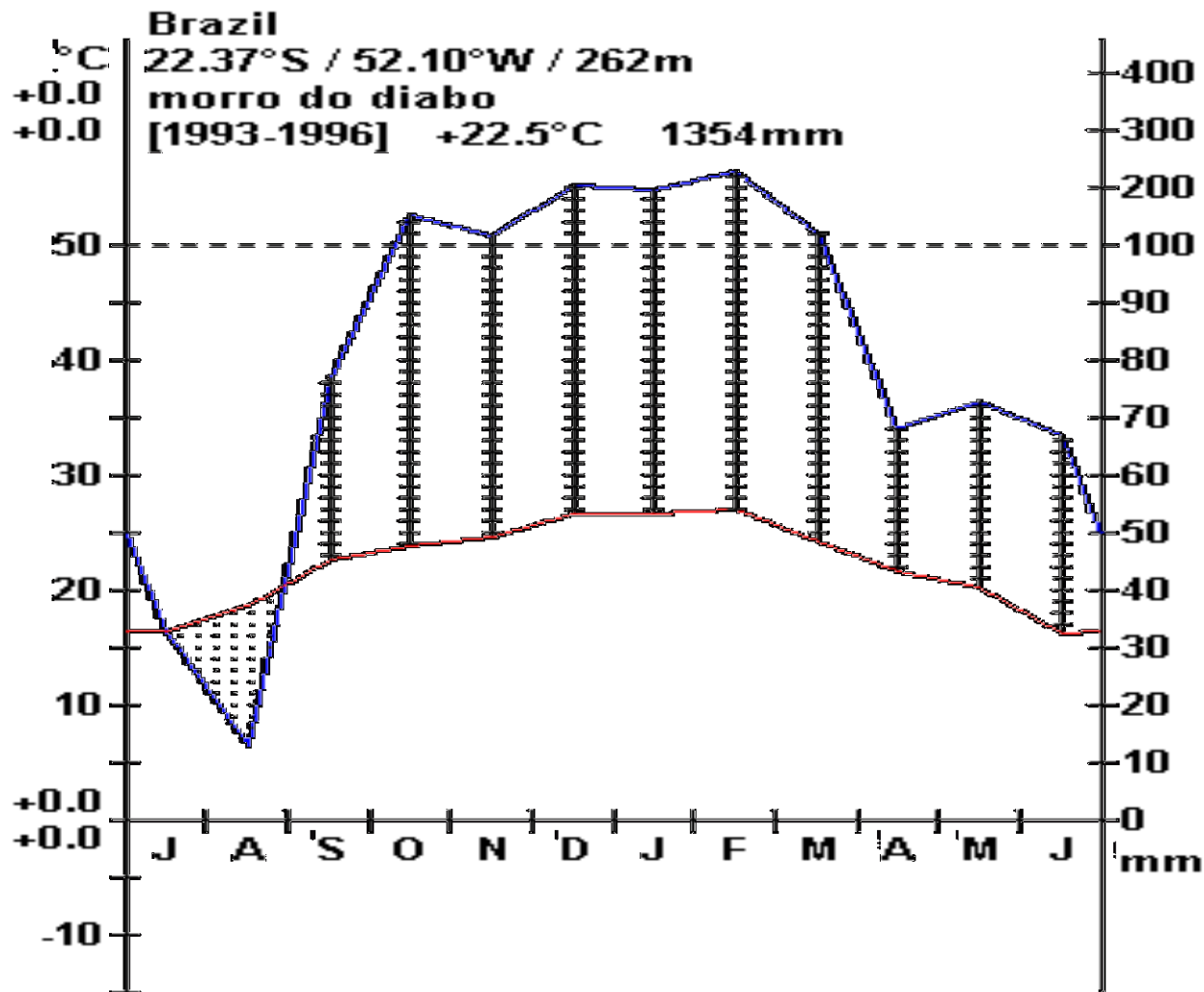
Walter Climate Diagram (77-81)



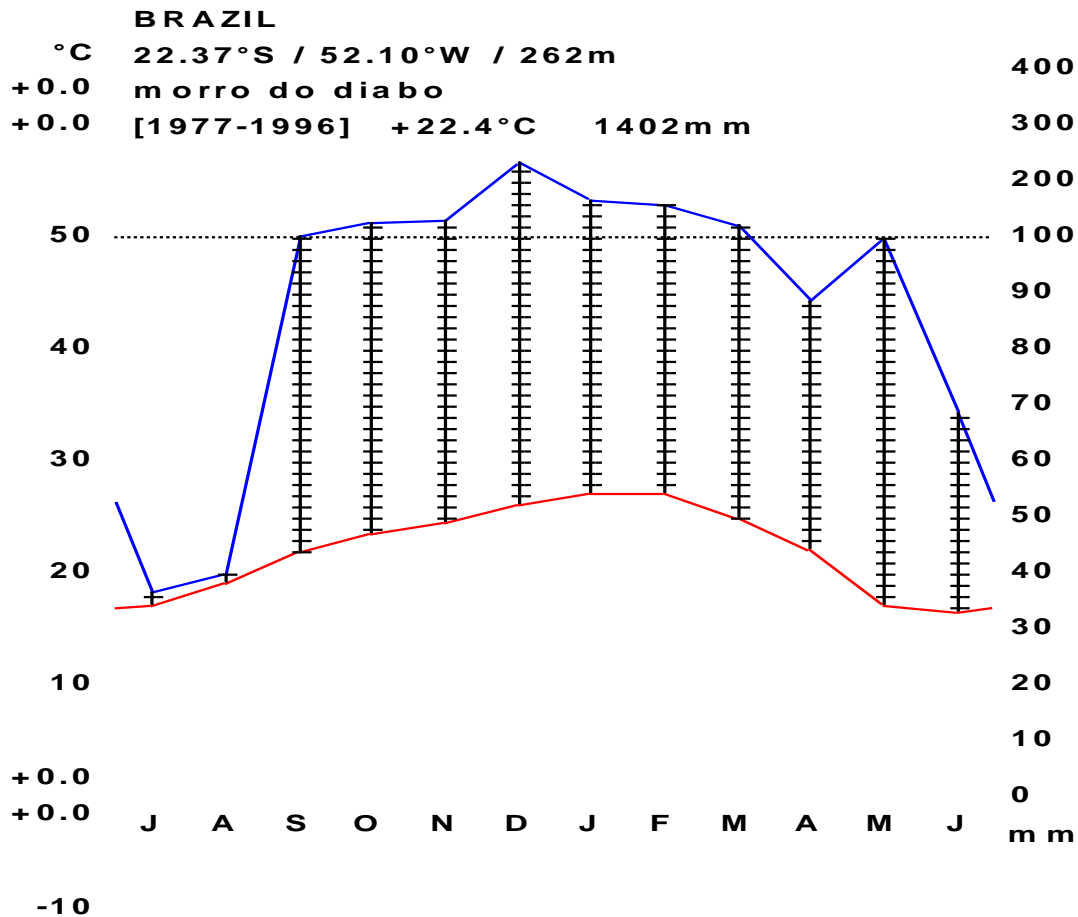
Walter Climate Diagram (82-87)



Walter Climate Diagram (93-96)



Walter Climate Diagram (77-96)





Observations

- There are periods of times within the year (july-august) that receive considerably less rainfall.
- This abiotic factor acting synergistically with the annual decrease in temperature (tropical winter) may account for the deciduous habit expresses by some trees within the region



Results

- Annual rainfall for Morro do Diabo State Park $> 1300\text{mm}$ for the time intervals studied
- February and March were consistently the months of highest temperatures
- July and August were consistently the months of lowest temperatures
- the average annual temperature ranged between 22.5 and $22.7\text{ }^{\circ}\text{C}$



Conclusion

- After examining the World Climate software and analyzing data specific to this site, we have classified this ecosystem as a mesophytic deciduous rainforest, part of the larger Moist Atlantic Rainforest, typical of South East Brazil.